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MORGAN LEWIS & BOCKIUS LLP  
1111 PENNSYLVANIA AVENUE NW  
WASHINGTON, DC 20004

EXAMINER

TRAN, MY CHAU T

ART UNIT	PAPER NUMBER
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1639

DATE MAILED: 10/03/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/775,840

Applicant(s)

DWYER ET AL.

Examiner

My-Chau T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 March 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-113 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-113 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION*****Election/Restrictions***

1. It is noted that in the present invention, the formula (e.g.  $*F-R_1-L_1-R_2-P_{Hc1}-P_S-P_{Hc2}-(R_3-L_2-R_4-T)_y$ ) of claim 1 (and other independent claims) lacks a common structural elements since there is virtually no fixed structural element (e.g. core structure) each compounds of the formula are patentably distinct. Each peptide structure within each compounds are structurally, functionally, and/or biologically distinct from each other (e.g. the peptide with length of 5-25 amino acid such penta peptide, hexa peptide, septet peptide ..... quinivicena peptide are all structurally distinct from each other). Additionally, the formula presented for the water-soluble peptidic substrates does not constitute a proper "Markush group" of compounds. A proper Markush claim can only be acknowledged if it can be shown that : a) all alternatives have a common activity; and b) a common structural elements. See MPEP 803.02.

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-2, 6-15, and 17-40, drawn to a water-soluble pegylated kinase substrate, classified in class 530, subclass 300+.
- II. Claims 1, 3, 5-15, and 17-40 drawn to a water-soluble pegylated phosphatase substrate, classified in class 530, subclass 300+.
- III. Claims 1, 4, 6-15, and 17-40, drawn to a water-soluble pegylated protease substrate, classified in class 530, subclass 300+.
- IV. Claims 1-2, 6-14, 16-19, and 21-40, drawn to a water-soluble saccharide modified kinase substrate, classified in class 530, subclass 300+.

- V. Claims 1, 3, 5-14, 16-19, and 21-40, drawn to a water-soluble saccharide modified phosphatase substrate, classified in class 530, subclass 300+.
- VI. Claims 1, 4, 6-14, 16-19, and 21-40, drawn to a water-soluble saccharide protease substrate, classified in class 530, subclass 300+.
- VII. Claims 41, 43-52, and 54-77, drawn to a library of water-soluble pegylated kinase substrate, classified in class 435, subclass Dig. 35.
- VIII. Claims 41, 42-52, and 54-77, drawn to a library of water-soluble pegylated phosphatase substrate, classified in class 435, subclass Dig. 35.
- IX. Claims 41, 43-52, and 54-77, drawn to a library of water-soluble pegylated protease substrate, classified in class 435, subclass Dig. 35.
- X. Claims 41, 43-51, and 53-77, drawn to a library of water-soluble saccharide modified kinase substrate, classified in class 435, subclass Dig. 35.
- XI. Claims 41, 42-51, and 53-77, drawn to a library of water-soluble saccharide modified phosphatase substrate, classified in class 435, subclass Dig. 35.
- XII. Claims 41, 43-51, and 53-77, drawn to a library of water-soluble saccharide protease substrate, classified in class 435, subclass Dig. 35.
- XIII. Claims 78, 79, and 82-91, drawn to a method of screening a library of water-soluble pegylated kinase substrate, classified in class 436, subclass 86.
- XIV. Claims 78, 80, and 82-91, drawn to a method of screening a library of water-soluble pegylated phosphatase substrate, classified in class 436, subclass 86.
- XV. Claims 78, and 81-91, drawn to a method of screening a library of water-soluble pegylated protease substrate, classified in class 436, subclass 86.

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- XVI. Claims 78, 79, and 82-91, drawn to a method of screening a library of water-soluble saccharide modified kinase substrate, classified in class 435, subclass Dig. 15.
- XVII. Claims 78, 80, and 82-91, drawn to a method of screening a library of water-soluble saccharide modified phosphatase substrate, classified in class 435, subclass Dig. 15.
- XVIII. Claims 78, and 81-91, drawn to a method of screening a library of water-soluble saccharide protease substrate, classified in class 435, subclass Dig. 15.
- XIX. Claims 92-95, and 97-105, drawn to protein kinase assay of water-soluble peptide substrate, classified in class 436, subclass 501.
- XX. Claims 92-94, and 96-105, drawn to a phosphatase assay of water-soluble peptide substrate, classified in class 435, subclass 21.
- XXI. Claims 106-113, drawn to a protease assay of water-soluble peptide substrate, classified in class 435, subclass 18.

The inventions are distinct, each from the other because of the following reasons:

3. Inventions of Groups I-VI are unrelated compound of water-soluble peptide substrate. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different peptidic substrate compounds as claimed have different structures, different functions and different effects, which is noted in first paragraph.

4. Inventions of Groups VII-XII are unrelated composition (library) of water-soluble peptide substrates. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different composition (library) of water-soluble peptide substrates as claimed have different structures, different functions and different effects, which is noted in first paragraph.

5. Inventions of Groups I-VI and Groups VII-XII are unrelated compounds and compositions (library). Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different libraries of compounds (composition) are patentably distinct from the individual compounds, since the composition reside in the patentability of the combination.

6. Inventions of Groups XIII-XXI are unrelated methods. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the methods are different because the use different steps, require different reagents and will produce different product and or results.

The method step of separating the members of the library of a water-soluble pegylated kinase substrate that are soluble of Group XIII is not required by the claims of Groups XIV-XXI.

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The method step of separating the members of the library of a water-soluble pegylated phosphatase substrate that are soluble of Group XIV is not required by the claims of Group XIII, and Groups XV-XXI. The method step of separating the members of the library of a water-soluble pegylated protease substrate that are soluble of Group XV is not required by the claims of Groups XIII-XIV, and Groups XVI-XXI. The method step of separating the members of the library of a water-soluble saccharide modified kinase substrate that are soluble of Group XVI is not required by the claims of Groups XIII-XV, and Groups XVII-XXI. The method step of separating the members of the library of a water-soluble saccharide modified phosphatase substrate that are soluble of Group XVII is not required by the claims of Groups XIII-XVI, and Groups XVIII-XXI. The method step of separating the members of the library of a water-soluble saccharide protease substrate that are soluble of Group XVIII is not required by the claims of Groups XIII-XVII, and Groups XIX-XXI. The method step of electrophoretically separating the phosphorylated peptidic substrate from the unphosphorylated peptidic substrate to produce a localized phosphorylated peptidic substrate fraction and unphosphorylated peptidic substrate fraction, and a kinase of Group XIX is not required by the claims of Groups XIII-XVIII, and Groups XX-XXI. The method step of electrophoretically separating the phosphorylated peptidic substrate from the unphosphorylated peptidic substrate to produce a localized phosphorylated peptidic substrate fraction and unphosphorylated peptidic substrate fraction, and a phosphatase of Group XX is not required by the claims of Groups XIII-XIX, and Group XXI. The method step of electrophoretically separating the cleaved peptidic substrate from the uncleaved peptidic substrate to produce at least one localized cleaved peptidic substrate fraction and an uncleaved peptidic substrate fraction of Group XXI is not required by the claims of Groups XIII-XX.

7. Inventions of Groups I-XII (product) and Groups XIII-XXI (process) are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process of using that product such as the method of making a microarray such as the method of making a microarray or the method of screening for DNA that binds to the peptide.

8. Because these inventions are distinct for the reasons given above and the searches required are not co-extensive thus requiring a burdensome search, restriction for examination purposes as indicated is proper. Additionally, different patentability considerations are involved for each group. For example, a patentability determination for Group I would involve a determination of the patentability of a water-soluble pegylated kinase substrate while a patentability determination for Group XIV would involve a consideration of the patentability of a method of screening a library of water-soluble pegylated phosphatase substrate. These considerations are very different in nature.

Even though some of the groups are classified in the same class and/or subclass, this has no effect on the non-patent literature search. Different groups would require completely different searches in non-patent databases, and there is no exception that the searches would be co-extensive.



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9. This application contains claims directed to the following patentably distinct species of the claimed invention:

10. If applicants elect the invention of **Group I (Claims 1-2, 6-15, and 17-40)**, applicants are required to further elect *one specific* species of a water-soluble pegylated kinase substrate that would read on the formula of  $*F-R_1-L_1-R_2-P_{Hc1}-P_S-P_{Hc2}-(R_3-L_2-R_4-T)_y$ .

The species of a water-soluble pegylated kinase substrate are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.

*For this response to be complete and for search purposes, applicants should provide the chemical structure of elected compound, wherein each specific formula substituents of each of the above identified elected species are defined either by picture, or by expressing the species in terms of the variables of the formula.*

11. If applicants elect the invention of **Group II (Claims 1, 3, 5-15, and 17-40)**, applicants are required to further elect *one specific* species of a water-soluble pegylated phosphatase substrate that would read on the formula of  $*F-R_1-L_1-R_2-P_{Hc1}-P_S-P_{Hc2}-(R_3-L_2-R_4-T)_y$ .

The species are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate

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manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.

*For this response to be complete and for search purposes, applicants should provide the chemical structure of elected compound, wherein each specific formula substituents of each of the above identified elected species are defined either by picture, or by expressing the species in terms of the variables of the formula.*

12. If applicants elect the invention of **Group III (Claims 1, 4, 6-15, and 17-40)**, applicants are required to further elect *one specific* species of a water-soluble pegylated protease substrate that would read on the formula of  $*F-R_1-L_1-R_2-P_{Hc1}-P_S-P_{Hc2}-(R_3-L_2-R_4-T)_y$ .

The species are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.

*For this response to be complete and for search purposes, applicants should provide the chemical structure of elected compound, wherein each specific formula substituents of each of the above identified elected species are defined either by picture, or by expressing the species in terms of the variables of the formula.*

13. If applicants elect the invention of **Group IV (Claims 1-2, 6-14, 16-19, and 21-40)**, applicants are required to further elect *one specific* species of a water-soluble saccharide

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modified kinase substrate that would read on the formula of  $*F-R_1-L_1-R_2-P_{Hc1}-P_S-P_{Hc2}-(R_3-L_2-R_4-T)_y$ .

The species are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.

*For this response to be complete and for search purposes, applicants should provide the chemical structure of elected compound, wherein each specific formula substituents of each of the above identified elected species are defined either by picture, or by expressing the species in terms of the variables of the formula.*

14. If applicants elect the invention of **Group V (Claims 1, 3, 5-14, 16-19, and 21-40)**, applicants are required to further elect *one specific* species of a water-soluble saccharide modified phosphatase substrate that would read on the formula of  $*F-R_1-L_1-R_2-P_{Hc1}-P_S-P_{Hc2}-(R_3-L_2-R_4-T)_y$ .

The species are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.

*For this response to be complete and for search purposes, applicants should provide the chemical structure of elected compound, wherein each specific formula substituents of*

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*each of the above identified elected species are defined either by picture, or by expressing the species in terms of the variables of the formula.*

15. If applicants elect the invention of **Group VI (Claims 1, 4, 6-14, 16-19, and 21-40)**, applicants are required to further elect *one specific* species of a water-soluble saccharide protease substrate that would read on the formula of  $*F-R_1-L_1-R_2-P_{Hc1}-P_S-P_{Hc2}-(R_3-L_2-R_4-T)_y$ .

The species are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.

*For this response to be complete and for search purposes, applicants should provide the chemical structure of elected compound, wherein each specific formula substituents of each of the above identified elected species are defined either by picture, or by expressing the species in terms of the variables of the formula.*

16. If applicants elect the invention of **Group VII (Claims 41, 43-52, and 54-77)**, applicants are required to further elect *one specific* species of a library of water-soluble pegylated kinase substrate that would read on the formula of  $*F-R_1-L_1-R_2-P_{Hc1}-P_S-P_{Hc2}-(R_3-L_2-R_4-T)_y$ .

The species are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.

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*For this response to be complete and for search purposes, applicants should provide the chemical structure of elected composition, wherein each specific formula substituents of each of the above identified elected species are defined either by picture, or by expressing the species in terms of the variables of the formula.*

17. If applicants elect the invention of **Group VIII (Claims 41, 42-52, and 54-77)**, applicants are required to further elect *one specific* species of a library of water-soluble pegylated phosphatase substrate that would read on the formula of  $*F-R_1-L_1-R_2-P_{Hc1}-P_S-P_{Hc2}-(R_3-L_2-R_4-T)_y$ .

The species are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.

*For this response to be complete and for search purposes, applicants should provide the chemical structure of elected composition, wherein each specific formula substituents of each of the above identified elected species are defined either by picture, or by expressing the species in terms of the variables of the formula.*

18. If applicants elect the invention of **Group IX (Claims 41, 43-52, and 54-77)**, applicants are required to further elect *one specific* species of a library of water-soluble pegylated protease substrate that would read on the formula of  $*F-R_1-L_1-R_2-P_{Hc1}-P_S-P_{Hc2}-(R_3-L_2-R_4-T)_y$ .

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The species are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.

*For this response to be complete and for search purposes, applicants should provide the chemical structure of elected composition, wherein each specific formula substituents of each of the above identified elected species are defined either by picture, or by expressing the species in terms of the variables of the formula.*

19. If applicants elect the invention of **Group X (Claims 41, 43-51, and 53-77)**, applicants are required to further elect *one specific* species of a library of water-soluble saccharide modified kinase substrate that would read on the formula of  $*F-R_1-L_1-R_2-P_{Hc1}-P_S-P_{Hc2}-(R_3-L_2-R_4-T)_y$ .

The species are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.

*For this response to be complete and for search purposes, applicants should provide the chemical structure of elected composition, wherein each specific formula substituents of each of the above identified elected species are defined either by picture, or by expressing the species in terms of the variables of the formula.*

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20. If applicants elect the invention of **Group XI (Claims 41, 42-51, and 53-77)**, applicants are required to further elect *one specific* species of a library of water-soluble saccharide modified phosphatase substrate that would read on the formula of  $*F-R_1-L_1-R_2-P_{Hc1}-P_S-P_{Hc2}-(R_3-L_2-R_4-T)_y$ .

The species are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.

*For this response to be complete and for search purposes, applicants should provide the chemical structure of elected composition, wherein each specific formula substituents of each of the above identified elected species are defined either by picture, or by expressing the species in terms of the variables of the formula.*

21. If applicants elect the invention of **Group XII (Claims 41, 43-51, and 53-77)**, applicants are required to further elect *one specific* species of a library of water-soluble saccharide protease substrate that would read on the formula of  $*F-R_1-L_1-R_2-P_{Hc1}-P_S-P_{Hc2}-(R_3-L_2-R_4-T)_y$ .

The species are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.

*For this response to be complete and for search purposes, applicants should provide the chemical structure of elected composition, wherein each specific formula substituents of*

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*each of the above identified elected species are defined either by picture, or by expressing the species in terms of the variables of the formula.*

22. If applicants elect the invention of **Group XIII (Claims 78, 79, and 82-91)**, applicants are required to further elect *one* species from *each* group below:

- a) A *single specific* species of a library of water-soluble pegylated kinase substrate.
- b) A *single specific* species of the separation method step “(c)”.

The species are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.

23. If applicants elect the invention of **Group XIV (Claims 78, 80, and 82-91)**, applicants are required to further elect *one* species from *each* group below:

- a) A *single specific* species of a library of water-soluble pegylated phosphatase substrate.
- b) A *single specific* species of phosphorylated amino acid residue.
- c) A *single specific* species of the separation method step “(c)”.

The species are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.



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24. If applicants elect the invention of **Group XV (Claims 78, and 81-91)**, applicants are required to further elect *one* species from *each* group below:

- a) A *single specific* species of a library of water-soluble pegylated protease substrate.
- b) A *single specific* species of the separation method step "(c)".

The species are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.

25. If applicants elect the invention of **Group XVI (Claims 78, 79, and 82-91)**, applicants are required to further elect *one* species from *each* group below:

- a) A *single specific* species of a library of water-soluble saccharide modified kinase substrate.
- b) A *single specific* species of the separation method step "(c)".

The species are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.

26. If applicants elect the invention of **Group XVII (Claims 78, 80, and 82-91)**, applicants are required to further elect *one* species from *each* group below:

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a) A *single specific* species of a library of water-soluble saccharide modified phosphatase substrate.

b) A *single specific* species of phosphorylated amino acid residue.

c) A *single specific* species of the separation method step “(c)”.

The species are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.

27. If applicants elect the invention of **Group XVIII (Claims 78, and 81-91)**, applicants are required to further elect *one* species from *each* group below:

a) A *single specific* species of a library of water-soluble saccharide protease substrate.

b) A *single specific* species of the separation method step “(c)”.

The species are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.

28. If applicants elect the invention of **Group XIX (Claims 92-95, and 97-105)**, applicants are required to further elect *one* species from *each* group below:

a) A *single specific* species of water-soluble peptide substrate.

b) A *single specific* species of the “detection moiety”.

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The species are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.

29. If applicants elect the invention of **Group XX (Claims 92-94, and 96-105)**, applicants are required to further elect *one* species from *each* group below:

- a) A *single specific* species of water-soluble peptide substrate.
- b) A *single specific* species of the “detection moiety”.

The species are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.

30. If applicants elect the invention of **Group XXI (Claims 106-113)**, applicants are required to further elect *one* species from *each* group below:

- a) A *single specific* species of water-soluble peptide substrate.
- b) A *single specific* species of the “detection moiety”.

The species are distinct, each from the other, because each species have different chemical structure and/or physiochemical properties and would be capable of separate manufacture and/or use; and would necessitate different and separately burdensome manual and computer bibliographic and structure searches in both patent and non-patent areas.

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31. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

32. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

33. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

34. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

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35. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to My-Chau T. Tran whose telephone number is 703-305-6999. The examiner is on Increased Flex Schedule and can normally be reached on Monday: 8:00-2:30; Tuesday-Thursday: 7:30-5:00; Friday: 8:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew J. Wang can be reached on 703-306-3217. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1123.

mct  
September 29, 2003

  
PADMAASHRI PONNALURI  
PRIMARY EXAMINER